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***Manner: ACCIDENT***

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The Medical Examiner certified 721 deaths as non-traffic accidents for the calendar year 2006. The largest group of accidental deaths was those who died as a result of a fall, 43% (308/721). Of the 308 deaths attributed to injury sustained in falls, 75% (232/308) occurred in the age group 70 years and over. A large percentage of these falls were ground-level falls in elderly individuals, which resulted in fractures leading to complications such as pneumonia.

The second largest group of non-traffic accidental deaths was individuals who died as a result of accidental overdoses of drugs and/or poisons, representing 36% (262/721). By age, the largest percentage of these accidental drug deaths, 31% (82/262), occurred among adults between 50-59 years. The second largest group, 29% (76/262), included adults between the ages of 40-49. Seventeen percent (44/262) were adults between 30-39 years of age. Six accidental drug deaths were between the ages of 16-19 years, one was in the age group 13 – 15 years, and one accidental drug death occurred in an infant under one year of age.

The 2006 drug rate number (262) represents a 21% increase compared to the 216 accidental drug deaths in 2005. A more detailed discussion of these deaths is presented in the section "Death Due to Drugs and Poisons" on page 83 and 84.

Twenty-three (23) deaths resulted from fire or thermal injury, a decrease from 26 in 2005 and 24 in 2004. Of the 23 fire-related deaths, 35% (8/23) were the result of accidents that occurred outside of King County. The injured were transported to Harborview Medical Center's Burn Intensive Care Unit where they died.

Another category of accidental deaths worthy of comment is death resulting from drowning. There were 30 drowning deaths in 2006, as compared to 19 drowning deaths in 2005, 17 in 2004, 27 in 2003, and 32 in 2002.

A comment is necessary to clarify the cause of death listed as "aspiration." This type of death results from a person choking on a foreign object, often a bolus of food while eating. In 2006 there were nine (9) deaths due to aspiration of a foreign body compared to ten (10) in 2005, eight (8) in 2004, nine (9) in 2003, and five (5) in 2002.

Of the 721 accidental deaths in 2006, 16% (114/721) were the result of incidents which occurred outside of King County, but the death took place within King County. These deaths were the result of the injured being transported from outside King County to medical facilities within King County where they died. Since these deaths occurred in King County, they fall under King County Medical Examiner jurisdiction.

A special subset of deaths designated "Complication of Therapy" has been incorporated in the statistical analyses of Accidental deaths but warrants special mention because of an apparent upward trend in incidence and increased public interest. A Complication of Therapy is defined as a death that arises as a predictable consequence of appropriate medical therapy. Circumstances that are excluded from this category include falls and mechanical injuries in hospitals, inadvertent misadministration of drugs, wrong-sided surgeries, and wholly unexpected procedure related injuries, etc.

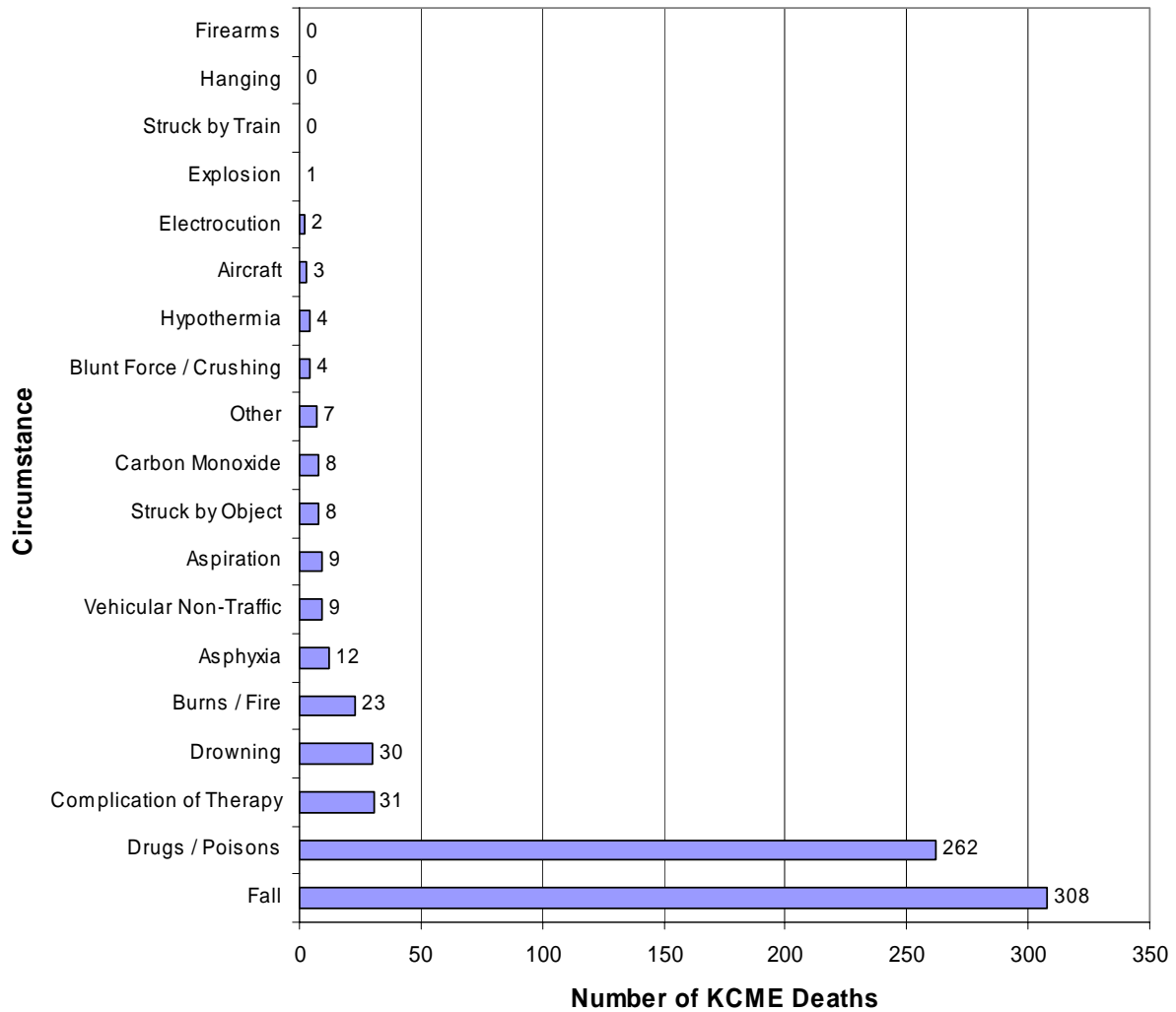
For example, the manner of death in the case of a person with no known drug allergies and a minor infection who is administered an appropriate dose of penicillin but subsequently develops a fatal allergic reaction to the drug and dies would be Complication of Therapy. Contrast this example with the case of a hospital patient who is written a proper prescription for a heart medication but is administered an overdose of the medication by a healthcare provider, and the manner of death would be Accident, not Complication of Therapy.

It is important to note that the classification of a death as a Complication of Therapy is a non-judgmental means by which the inherent risk of medical therapies can be recognized and tracked. By no means is Complication of Therapy synonymous with malpractice or negligence.

Complication of Therapy deaths have increased in the previous ten years, from ten (10) in 1997 to 31 in 2006 (see table on p. 27, Ten Year Perspective of Non-Traffic Accidental Death Circumstances) and can be divided into three general categories: drug-related, consequence of medical procedure, and consequence of surgery. Drug-related includes anaphylactic/allergic reaction, hemorrhagic complications of anticoagulants, anesthesia related events, and other adverse drug reactions. Consequence of medical procedure refers to complications from procedures that are therapeutic or diagnostic but do not meet the criteria for surgery, such as placement of catheters, penetration of body cavities by needles, or manipulation of body regions, etc. Consequence of surgery refers to direct anatomic damage during a procedure and usually involves a diseased organ system, such as perforation of a viscus or vessel or hemorrhagic complications of surgery.

For 2006, there were 31 deaths classified as Complication of Therapy. Graph 3-4 shows the Complication of Therapy deaths by general category and Graph 3-5 further divides the general category of Surgical Injury into "type of surgery" and "comorbidity" (comorbidity is defined as the coexistence of significant natural disease).

There may be multiple reasons for this apparent upward trend in the incidence of Complications of Therapy over the last ten years but the most important factor is probably the rate at which non-natural deaths are reported to the KCMEO. The medical examiner is dependent on clinical providers to report deaths that may have been a consequence of medical therapy. Recognition of the importance of identifying and reporting these deaths by the medical community has surged since the Institute of Medicine of the National Academy of Sciences published a report in 1999 that estimated that up to 98,000 preventable deaths may occur each year in the United States due to medical errors. The subsequent public interest and efforts by the healthcare system to address issues of patient safety may be resulting in a greater percentage of these cases being reported to the medical examiner.

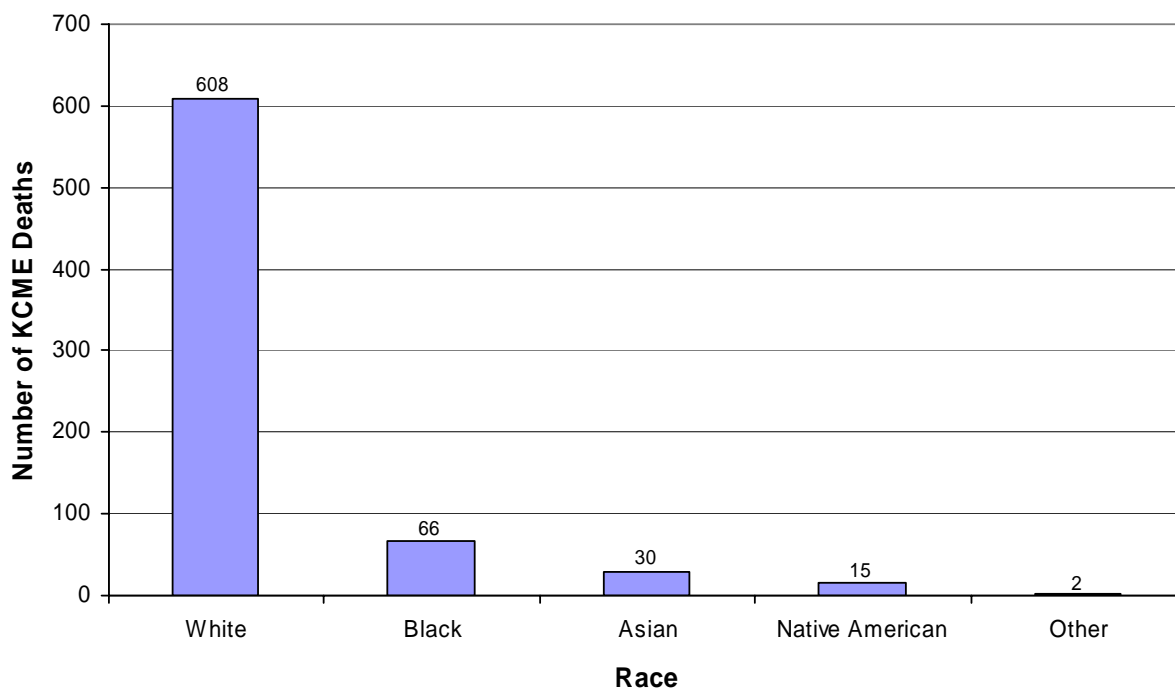
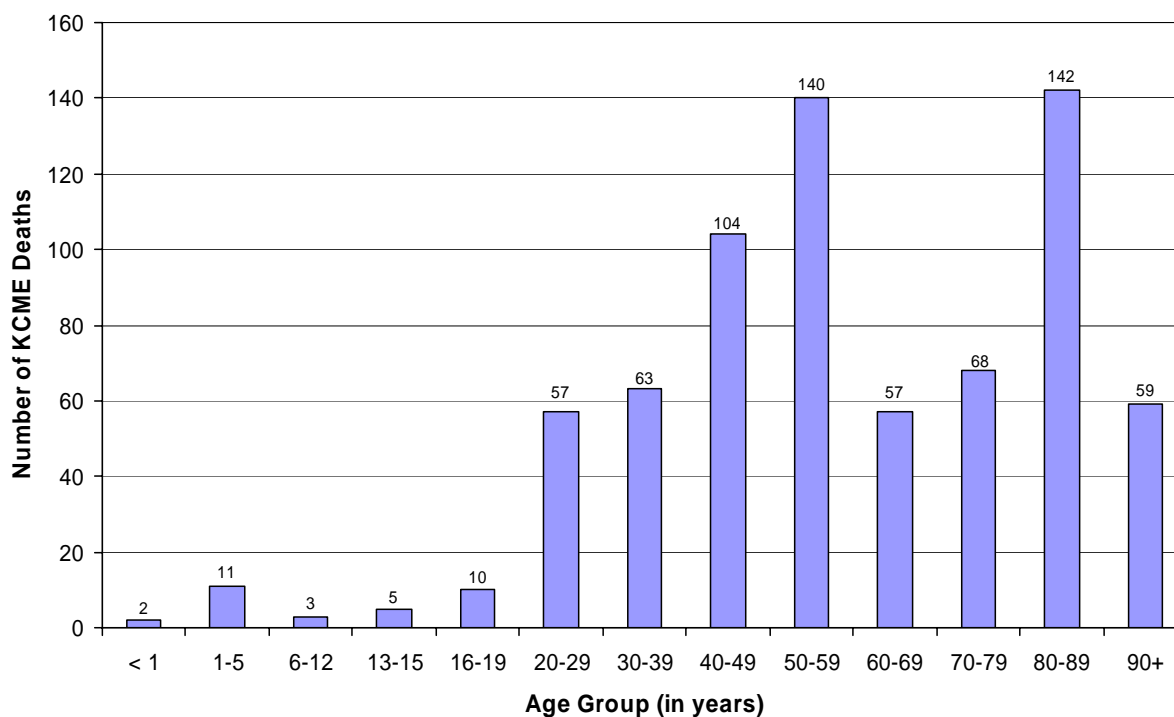
**Graph 3-1      Circumstances of Accidental Death / King County Medical Examiner / 2006**

**Table 3-1 Circumstances of Accidental Death / Race / Sex / KCME / 2006**

CIRCUMSTANCES / SEX	RACE					SUB TOTAL	TOTAL
	WHITE	BLACK	ASIAN	NATIVE AMERICAN	OTHE R		
Aircraft	1	2	0	0	0		3
Male	1	2	0	0	0	3	
Female	0	0	0	0	0	0	
Asphyxia (compressional / positional / mechanical)	11	1	0	0	0		12
Male	10	0	0	0	0	10	
Female	1	1	0	0	0	2	
Aspiration	8	0	1	0	0		9
Male	5	0	0	0	0	5	
Female	3	0	1	0	0	4	
Blunt Force / Crushing	4	0	0	0	0		4
Male	4	0	0	0	0	4	
Female	0	0	0	0	0	0	
Burns / Fire	18	1	2	2	0		23
Male	9	1	0	2	0	12	
Female	9	0	2	0	0	11	
Carbon Monoxide	4	0	4	0	0		8
Male	4	0	3	0	0	7	
Female	0	0	1	0	0	1	
Complication of Therapy	28	1	2	0	0		31
Male	13	0	1	0	0	14	
Female	15	1	1	0	0	17	
Drowning	18	6	5	0	1		30
Male	13	6	3	0	1	23	
Female	5	0	2	0	0	7	
Drugs / Poisons	204	46	3	9	0		262
Male	137	34	3	6	0	180	
Female	67	12	0	3	0	82	
Electrocution	2	0	0	0	0		2
Male	2	0	0	0	0	2	
Female	0	0	0	0	0	0	
Explosion	1	0	0	0	0		1
Male	1	0	0	0	0	1	
Female	0	0	0	0	0	0	
Fall	283	8	13	4	0		308
Male	140	7	6	2	0	155	
Female	143	1	7	2	0	153	

**Table 3-1      Circumstances of Accidental Death / Race / Sex / KCME / 2006** (continued)

CIRCUMSTANCES / SEX	RACE					SUB TOTAL	TOTAL
	WHITE	BLACK	ASIAN	NATIVE AMERICAN	OTHE R		
Firearms	0	0	0	0	0		0
<i>Male</i>	0	0	0	0	0	0	
<i>Female</i>	0	0	0	0	0	0	
Hanging	0	0	0	0	0		0
<i>Male</i>	0	0	0	0	0	0	
<i>Female</i>	0	0	0	0	0	0	
Hypothermia	4	0	0	0	0		4
<i>Male</i>	2	0	0	0	0	2	
<i>Female</i>	2	0	0	0	0	2	
Struck by Object	8	0	0	0	0		8
<i>Male</i>	8	0	0	0	0	8	
<i>Female</i>	0	0	0	0	0	0	
Struck by Train	0	0	0	0	0		0
<i>Male</i>	0	0	0	0	0	0	
<i>Female</i>	0	0	0	0	0	0	
Vehicular Non-Traffic	7	1	0	0	1		9
<i>Male</i>	5	1	0	0	1	7	
<i>Female</i>	2	0	0	0	0	2	
Other	7	0	0	0	0		7
<i>Male</i>	5	0	0	0	0	5	
<i>Female</i>	2	0	0	0	0	2	
<b>Totals</b>	<b>608</b>	<b>66</b>	<b>30</b>	<b>15</b>	<b>2</b>		<b>721</b>
Percent	84.3%	9.2%	4.1%	2.1%	0.3%		100%

**Graph 3-2 Accidental Deaths / Race / King County Medical Examiner / 2006****Graph 3-3 Accidental Deaths / Age Group / King County Medical Examiner / 2006**

**Table 3-2      Circumstances of Accidental Death / Age / Sex / KCME / 2006**

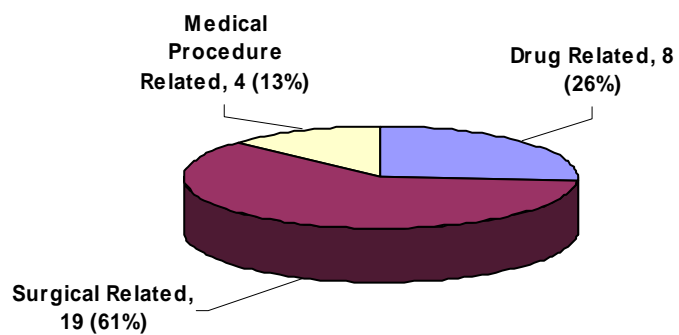
CIRCUMSTANCES / SEX	AGE GROUP (YEARS)													SUB TOTAL	TOTAL
	< 1	1 to 5	6 to 12	13 to 15	16 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 to 69	70 to 79	80 to 89	90 +		
Aircraft	0	0	0	0	0	1	2	0	0	0	0	0	0		3
Male	0	0	0	0	0	1	2	0	0	0	0	0	0	3	
Female	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Asphyxia (compress/positional/mech)	1	0	0	0	1	1	1	0	2	1	2	1	2		12
Male	1	0	0	0	1	1	1	0	2	1	2	1	0	10	
Female	0	0	0	0	0	0	0	0	0	0	0	0	2	2	
Aspiration	0	0	0	0	0	1	0	1	1	1	1	4	0		9
Male	0	0	0	0	0	1	0	0	1	1	0	2	0	5	
Female	0	0	0	0	0	0	0	1	0	0	1	2	0	4	
Blunt Force / Crushing	0	0	0	0	0	0	0	0	4	0	0	0	0		4
Male	0	0	0	0	0	0	0	0	4	0	0	0	0	4	
Female	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Burns / Fire	0	2	0	0	0	2	1	2	5	3	4	4	0		23
Male	0	0	0	0	0	2	0	1	4	1	3	1	0	12	
Female	0	2	0	0	0	0	1	1	1	2	1	3	0	11	
Carbon Monoxide	0	0	0	1	0	2	2	2	0	0	1	0	0		8
Male	0	0	0	1	0	2	2	1	0	0	1	0	0	7	
Female	0	0	0	0	0	0	0	1	0	0	0	0	0	1	
Complication of Therapy	0	2	0	0	2	3	3	2	5	5	6	2	1		31
Male	0	0	0	0	1	0	1	0	3	3	3	2	1	14	
Female	0	2	0	0	1	3	2	2	2	2	3	0	0	17	
Drowning	0	1	3	2	1	7	4	4	4	1	2	1	0		30
Male	0	1	3	1	1	6	2	3	4	1	1	0	0	23	
Female	0	0	0	1	0	1	2	1	0	0	1	1	0	7	
Drugs / Poisons	1	0	0	1	6	32	44	76	82	18	2	0	0		262
Male	0	0	0	1	6	25	29	51	54	13	1	0	0	180	
Female	1	0	0	0	0	7	15	25	28	5	1	0	0	82	
Electrocution	0	0	0	0	0	1	0	0	1	0	0	0	0		2
Male	0	0	0	0	0	1	0	0	1	0	0	0	0	2	
Female	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Explosion	0	0	0	0	0	0	0	0	0	1	0	0	0		1
Male	0	0	0	0	0	0	0	0	0	1	0	0	0	1	
Female	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Fall	0	0	0	1	0	4	2	14	29	26	48	12 8	56		308
Male	0	0	0	1	0	4	1	9	21	21	29	55	14	155	
Female	0	0	0	0	0	0	1	5	8	5	19	73	42	153	

**Table 3-2** Circumstances of Accidental Death / Age / Sex / KCME / 2006 (continued)

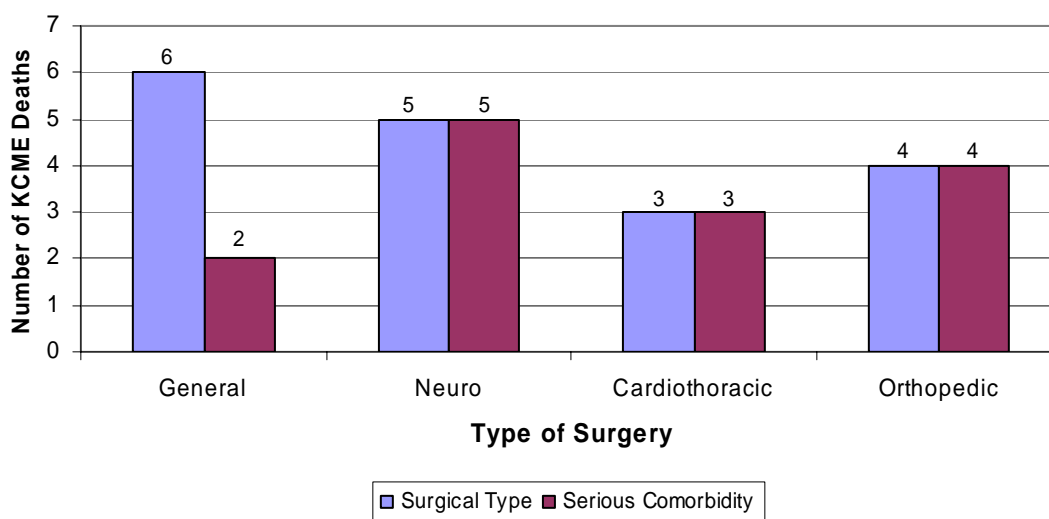
Circumstance / Sex	AGE GROUP (YEARS)													SUB TOTAL TOTAL	
	< 1	1 to 5	6 to 12	13 to 15	16 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 to 69	70 to 79	80 to 89	90 +		
Firearms	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Male</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Female</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hanging	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Male</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Female</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hypothermia	0	0	0	0	0	0	1	1	1	0	0	1	0	4	
<i>Male</i>	0	0	0	0	0	0	0	1	1	0	0	0	0	2	
<i>Female</i>	0	0	0	0	0	0	1	0	0	0	0	1	0	2	
Struck by Object	0	1	0	0	0	1	2	0	3	1	0	0	0	8	
<i>Male</i>	0	1	0	0	0	1	2	0	3	1	0	0	0	8	
<i>Female</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Struck by Train	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Male</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Female</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Vehicular Non-Traffic	0	4	0	0	0	1	1	1	0	0	1	1	0	9	
<i>Male</i>	0	3	0	0	0	1	1	1	0	0	0	1	0	7	
<i>Female</i>	0	1	0	0	0	0	0	0	0	0	1	0	0	2	
Other	0	1	0	0	0	1	0	1	3	0	1	0	0	7	
<i>Male</i>	0	1	0	0	0	1	0	1	2	0	0	0	0	5	
<i>Female</i>	0	0	0	0	0	0	0	0	1	0	1	0	0	2	
<b>Totals</b>	<b>2</b>	<b>11</b>	<b>3</b>	<b>5</b>	<b>10</b>	<b>57</b>	<b>63</b>	<b>104</b>	<b>140</b>	<b>57</b>	<b>68</b>	<b>142</b>	<b>59</b>	<b>721</b>	
Percent	0.3	1.5	0.4	0.7	1.4	7.9	8.7	14.5	19.4	7.9	9.4	19.7	8.2	100%	



Graph 3-4      Complication of Therapy / General Categories / KCME / 2006



Graph 3-5      Complication of Therapy / Surgical Injuries / KCME / 2006



**Table 3-3      Circumstances of Accidental Death / Sex / KCME / 2006**

CIRCUMSTANCES	SEX		TOTAL
	MALE	FEMALE	
Aircraft	3	0	3
Asphyxia (compressional / positional / mechanical)	10	2	12
Aspiration	5	4	9
Blunt Force / Crushing	4	0	4
Burns / Fire	12	11	23
Carbon Monoxide	7	1	8
Complication of Therapy	14	17	31
Drowning	23	7	30
Drugs / Poisons	180	82	262
Electrocution	2	0	2
Explosion	1	0	1
Fall	155	153	308
Firearms	0	0	0
Hanging	0	0	0
Hypothermia	2	2	4
Struck by Object	8	0	8
Struck by Train	0	0	0
Vehicular Non-Traffic	7	2	9
Other	5	2	7
<b>Totals</b>	<b>438</b>	<b>283</b>	<b>721</b>
Percent	61%	39%	100%

**Table 3-4 Circumstances of Accidental Death / Blood Alcohol Results / KCME / 2006**

CIRCUMSTANCES	TESTED		NOT TESTED	TOTAL
	TESTED POSITIVE	TESTED NEGATIVE		
Aircraft	0	3	0	3
Asphyxia (compressional/ positional / mechanical)	1	10	1	12
Aspiration	1	4	4	9
Blunt Force / Crushing	0	3	1	4
Burns / Fire	5	13	5	23
Carbon Monoxide	2	6	0	8
Complication of Therapy	0	21	10	31
Drowning	10	15	5	30
Drugs / Poisons	63	190	9	262
Electrocution	0	2	0	2
Explosion	0	0	1	1
Fall	18	94	196	308
Firearms	0	0	0	0
Hanging	0	0	0	0
Hypothermia	1	3	0	4
Struck by Object	0	7	1	8
Struck by Train	0	0	0	0
Vehicular Non-Traffic	1	5	3	9
Other	0	5	2	7
<b>Totals</b>	<b>102</b>	<b>381</b>	<b>238</b>	<b>721</b>
Percent	14%	53%	33%	100%

